

Science Based Drug Education is a research based presentation on various drugs and their effects on the human body. It also looks at some of the social issues that the drugs create and involve.

The Midwest HIDTA in partnership with federal, state and local law enforcement agencies developed Science Based Drug Education (SBDE) for School Resource Officers (SROs), Prevention Specialists, National Guard Drug Demand Reduction (NG-DDR) Personnel, Department of Corrections (DOC) Case Workers and Educators who teach drug awareness to their students.

One of the primary goals of SBDE is to provide prevention field workers with anti-drug information. Prevention field workers can develop presentations that are scientifically based from the instruction provided. In addition students will be given research material and information to share with administrators, teachers and parents that inform them about trends, warning signs and how to be proactive in the school environment.

Numerous studies show that if students do not try or use drugs before the age of 18, they are unlikely to do so after reaching 18. SROs, NG-DDRs and educators have daily interaction with youth between 10-17 years old-very formative years in decision of drug use. Prevention workers often deal with families that have drug abuse issues. Often the SRO, NG-DDR and educator are the first, or most positive, encounter a student has with authority figures outside the home. Many benefits can be gained through this first

positive interaction. Not only at school, but also in a student's home, neighborhood and community.

SBDE will increase the value and partnership between students, educators and the community. SBDE is a 3.5-day program that provides officers with scientifically based knowledge from subject matter experts. The goal of SBDE for SROs, NG-DDRs, prevention specialists and educators is not to "preach" to the students, but rather give them factual information. "If you use illegal drugs, you will have this negative physical effect on your body" or "You have heard this argument about drugs, here is what the facts state".

Topics that SBDE covers in the 3.5 days include:

### *Three Drug Categories*

1. The Origins And Classifications Of Stimulants
2. The Origins And Classifications Of Hallucinogens  
Types And Origins
3. The Origin And Classification Of Depressants

### *Gateway Theory*

1. "Gateway" Defined
2. Learned Behaviors
3. Associations And Links
4. Use Statistics

## *Brian Functions, Addiction, Neurological Processes and Abnormalities*

1. General Description And Functions Of The Brain
2. Brain's Communication Network
3. Drugs Change Your Brain – Addiction – Neuroadaptation
4. Neurotransmission
5. Cycle Of Drug Use Related To Pleasure Chemistry
6. The Four Dopaminergic Pathways
7. Neurotransmitters
8. Reward Pathways
9. Cognitive Effects Of Drug Use Summary

### *Marijuana*

1. The Historical Origins Of Marijuana
2. Terms Growing Stages, And Parts Of The Marijuana Plant
3. Growing And Cultivation Techniques
4. Types Of Marijuana Products And THC Content
5. Distribution (Smuggling) Techniques And Trafficking Of Marijuana
6. Marijuana Legalization Issues

### *MDMA (3,4-methylenedioxy-methamphetamine)*

1. The Origins Of MDMA
2. The Basic Chemical Properties Of MDMA
3. Description And Appearances Of MDMA
4. Manufacturing And Production Methods Of MDMA
5. The Distribution (Trafficking) And Sale Of MDMA

## ***Methamphetamine***

1. The Origins Of Methamphetamine
2. Forms And Appearances Of Methamphetamine
3. Methamphetamine Manufacturing And Production Methods
4. Production Hazards Associated With Methamphetamine Production
5. Distribution And Sales (Trafficking)

## ***Cocaine***

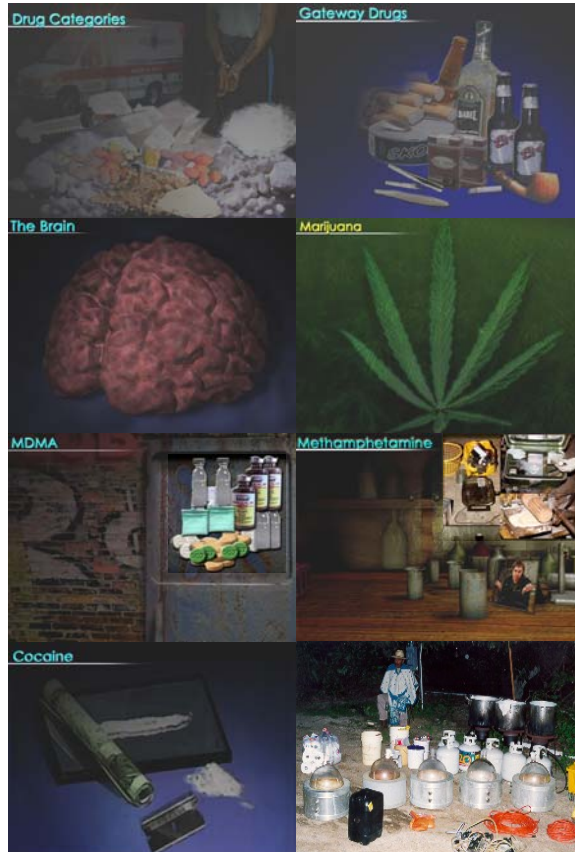
1. The Origins Of Cocaine
2. The Coca Plant And Its Parts
3. The Forms Of Cocaine And Street Level Forms
4. Cultivation, Manufacture And Production Methods Of Cocaine
5. Sources, Trafficking Techniques, And Distribution And Sales

## ***Drug Endangered Children (DEC)***

1. Statistics on Labs and Children Affected
2. How Labs Affect Children Present
3. What A DEC Team is and Its Responsibilities

## ***Drug Recognition Impairment***

1. Recognize impairment associated with drug abuse
2. Define the term “drug”
3. Name the three major categories of drugs
4. Identify added risk to underage abusers
5. Understand changing drug trends



## **Science Based Drug Education**



Presented by the  
**Iowa Department of Public Health -  
Division of Behavioral Health and  
Professional Licensure**  
in partnership with the  
**Midwest High Intensity Drug Trafficking  
Area (HIDTA)**  
and the  
**Iowa National Guard –  
Midwest Counterdrug Training Center**

